To Sir Joseph Banks, London, President of the Royal Astronomical Society

Berlin, April 2, 1784.

Sir,

I hope you will pardon the liberty I here take of communicating to you an astronomical discovery which in my opinion must attract the attention of all astronomers.

You have perhaps already heard of my having found that the new planet seen by Mr. Herschel had already been observed by Prof. Meyer at Gottingen [in 1756], who took it for a fixed star. The elements of an elliptical orbit of that planet, calculated last year at Paris (by Monsr. Mechain) have confirmed my suspicions, and have put the matter beyond all doubt. And if instead of a periodical time of 83 years & 4 months as calculated by Mr. Mechain, we gave it 83 years & 224 days, as I have calculated it, we shall have the planet exactly in the place where Meyer observed his fixed star at the time he mentions.

I have of late undertaken to search in the Catalogue of Fixed Stars of Flamstead, and found that the 34th star of Taurus, which Flamstead according to his Historia Celestis Britannica Nom. II. p. 86, observed Dec. 23, 1690 (New Style) and which I can no longer find in the Heavens in the lace he mentions, must likewise have been the new planet, since all circumstances accord very accurately with its theory. The elements of M. Mechain give for the place of the planet on the 23 Dec. 1690, when compared with place of Flamstead's star, a difference of 1°44‘ in long. & 1‘38“ in latitude, and if we admit the above period of 83 years 224 days, the difference will be only 25‘ in long. & 36“ in latitude. I am therefore of opinion, on account of the singular coincidence that it is more than likely that this 34th star of Taurus observed by Flamstead 94 years ago, and which is mentioned by no other astronomer, must actually have been the new planet which both Flamstead and Meyer took for a fixed star. My calculations at large will appear at Easter in a collection of all the observations and investigations hitherto made on that planet; and also in my Ephemerides for the year 1787 which will appear about Michael Mass. [September 29] next.

I thought it my duty, Sir, to communicate to you as President of so illustrous a Society of sciences, as yours, this astronomical intelligence as it concerns so eminent an observer as M. Herschel. If you think it deserving of the honour, I shall beg you to present it in my name to the Society.

I am with the greatest respect, your humble servant,

J. E. Bode, astronomer of the Royal Academy of Sciences.